



**Wisconsin Veterinary  
Diagnostic Laboratory**  
UNIVERSITY OF WISCONSIN-MADISON

## **Necropsy: Barbiturate Residue Rendering Guidelines**

**Background:** Federal regulations and vendor policies exist prohibiting the use of barbiturates in euthanasia of animals disposed of by rendering or landfill.

Species affected and disposal options: The following species can be rendered, if not euthanized with barbiturates or diagnosed with a select agent: bovines <30 months of age (including fetuses), bovines > 30 months of age with brain and spinal cord removed, bovines > 30 months of age with a negative BSE test, small ruminants with a negative scrapie test, poultry, pigs, camelids, lagomorphs, and fish. In addition to animals euthanized with barbiturates or animals diagnosed with a select agent, the following species cannot be disposed of by rendering: cervids, horses, large wildlife and zoo animals. Incineration is a disposal option for domestic dogs and cats, mustelids, pocket pets, and small wildlife and zoo animals.

### **WVDL Zero Tolerance Barbiturate Policy**

The WVDL contracts with an independent rendering company, which provides a service to the animal and meat industries of collecting and processing fallen livestock and other deceased animals and rendering such materials to make ingredients, such as animal proteins and fats, for use in animal food. At times, animals may be euthanized due to sickness or injury. Euthanizing agents such as pentobarbital have been implicated in domestic and wild animal poisoning, resulting from ingestion of rendered tissue from animals euthanized with these compounds. The FDA has identified pentobarbital as a chemical hazard affecting food safety and, as a result, prohibits using animals euthanized with chemical drugs, such as pentobarbital, in animal food. The FDA and rendering companies which process deadstock are actively sampling and testing animal byproducts and animal foods for pentobarbital.

WVDL has implemented this zero-tolerance policy to ensure that all animal remains intended for rendering are free of barbiturate chemical hazards, such as pentobarbital. Because of the financial implications associated with providing contaminated material to our rendering contractor, the WVDL has implemented the following strategies:

Addition of Barbiturate Free Clause to the General Submission form that must be acknowledged (signed) by the submitting veterinarian prior to a necropsy being performed on the animal at WVDL.

Collection and retention of liver samples from all animals entering the rendering stream for potential verification of barbiturate free status.

In the event that WVDL is notified by the rendering company of a barbiturate residue contaminated batch of finished product, the WVDL will submit retained liver samples from the tissues associated with the batch for barbiturate testing. WVDL will retain duplicate samples that are uniquely



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identified and tracked within the established LIMS and Quality systems. The submitting veterinarian for cases containing barbiturates will be held fiscally responsible for all costs incurred.

Due to the significant costs incurred by the submitting veterinarian for non-compliance with this policy, and potential future implications for loss of this economical disposal option, it is essential that submitting veterinarians accurately and completely fill out the 'Cause of Death' section of the General Submission form for all necropsy submissions, including a veterinarian signature acknowledging the barbiturate free clause. Submission of incomplete forms will result in testing delays.